

Application No. 10/687,727

Docket No.: NY-KIT 360-US

Reply to Office Action of December 27, 2007

REMARKS

Claims 11-15 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by European published patent application no. 0 993 952 A2 to Haruo (hereinafter "Haruo"). Claims 16-20 have been rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Haruo in view of U.S. Patent 5,949,556 to Tamai (hereinafter "Tamai"). Applicant respectfully traverses these rejections.

§102 Rejection:

A rejection based on 35 U.S.C. § 102 as the present case, requires that the cited reference disclose each and every element covered by the claim. *Electro Medical Systems S.A. v. Cooper Life Sciences Inc.*, 32 U.S.P.Q.2d 1017, 1019 (Fed. Cir. 1994); *Lewmar Marine Inc. v. Barient Inc.*, 3 U.S.P.Q.2d 1766, 1767-68 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988); *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir.), *cert. denied*, 484 U.S. 827 (1987). The Federal Circuit has mandated that 35 U.S.C. § 102 requires no less than "complete anticipation ... [a]nticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim." *Connell v. Sears, Roebuck & Co.*, 772 F.2d 1542, 1548, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983); *See also, Electro Medical Systems*, 32 U.S.P.Q. 2d at 1019; *Verdegaal Bros.*, 814 F.2d at 631.

Here, the Examiner has failed to establish a case that Haruo is an anticipatory reference because Haruo does not teach or suggest all the claim limitations of claims 11-15. Applicant respectfully submits that the Examiner cannot use hindsight gleaned from the present invention to reconstruct or modify the prior art reference to render claims unpatentable.

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Haruo is directed to a color conversion apparatus for preventing overflow in color reproduction in primary color signals. However, contrary to the Examiner's assertion, Haruo does not teach or suggest "determining a maximum value and a minimum value among correction values (b, g, r) of respective color components obtained for each pixel by using said correction function," "calculating differences ( $\Delta b$ ,  $\Delta g$ ,  $\Delta r$ ) between the respective correction values of the respective color components and said minimum value," and "calculating a difference (DR) between said maximum value and said minimum value" to correct pixel values, as required by independent claim 11 (and similarly required by independent claims 14 and 15). Whereas, Abstract and paragraphs [0062]-[0065] in Haruo, cited by the Examiner, merely describes detecting "maximum and minimum values of the three color difference signals for each pixel," "setting target values that restrict the maximum level and minimum level of the converted RGB signal to prevent overflow in primary color signals," and determining the value of the correction factor k1 from equation (8). The correction factor k1 determines an attenuation factor of color difference signals from the luminance signal Y, the maximum color difference signal value, and the maximum target reference value. Hence, contrary to the Examiner's assertion, Haruo merely describes determining the correction factor k1 from the luminance signal Y, the maximum color difference signal value, and the maximum target reference value. One of ordinary skill in the art will not equate (1) determining the maximum and minimum value among the correction values of respective color components of the present invention with determining the maximum and minimum value of the three color difference signals; nor (2) calculating differences ( $\Delta b$ ,  $\Delta g$ ,  $\Delta r$ ) between the respective correction values of the respective color components and the minimum correction value of the color component and (3) calculating the difference between the maximum and minimum correction values of the present invention with determining the correction factor k1 from the luminance signal Y, the maximum color difference signal value, and the maximum target reference value, as suggested by the Examiner. "To

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imbue one of ordinary skill in the art with knowledge of the present invention, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim of the insidious effect of hindsight syndrome, wherein that which only the inventor taught is used against the teacher." *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983).

Additionally, contrary to the Examiner's assertion, Haruo does not teach or suggest obtaining the color ratios for the respective color components by dividing the calculated differences ( $\Delta b$ ,  $\Delta g$ ,  $\Delta r$ ) between the respective correction values of the respective color components and the minimum value with the calculated difference (DR) between the maximum and minimum value, as required by independent claim 11 (and similarly required by independent claims 14 and 15). In fact, paragraphs [0031], [0062]-[0064] in Haruo, cited by the Examiner merely describe determining the correction factor. One of ordinary skill in the art will not equate obtaining the color ratios of the present invention with determining the correction factor, as suggested by the Examiner. Moreover, the color ratio of the present invention is determined for each color component of each image pixel while the value of the correction factor of Haruo is determined pixel by pixel, not determined for each color component. Thus, the "correction factor" of Haruo does not even correspond to the "color ratio" of the present invention. Applicants respectfully submit that the Examiner cannot use hindsight gleaned from the present invention to render the claim unpatentable.

Further, Haruo does not teach or suggest "controlling color balance adjustment so as to cause the correction value of the inappropriate pixel to agree with the respective color ratio thereof," as required by independent claim 11 (and similarly required by independent claims 14 and 15). However, as noted herein, Haruo is not suggestive of obtaining the "color ratio," as required by the claims of the present invention. The force of logic compels the conclusion that a prior art reference which is silent as to the

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existence of a claimed element, cannot teach such claimed element. Applicants respectfully submit that the Examiner cannot use hindsight gleaned from the present invention to contradict the clear teaching of the prior art reference to render the claims unpatentable. The prior must to be judged based on a full and fair consideration of what that art teaches, not by using applicants' invention as a blueprint for gathering various bits and modifying the pieces in an attempt to reconstruct Applicant's invention. Here, the Examiner has gone as far as to change the principle of the operation of the reference to render the reference inoperable for its intended purpose.

Therefore, since Haruo fails teach or suggest all of the claim limitations of independent claims 11, 14 and 15, it follows that Haruo does not anticipate or render obvious independent claims 11, 14 and 15, or any of claims 12 and 13 dependent on independent claim 11.

Furthermore, claim 12 depends on claim 11 and additionally requires utilizing "sums of said minimum value and respective product values obtained by multiplying a difference between the maximum output gradation value and the minimum value by the color ratios as the respective final pixel values if the correction value of at least one color component overflows from the maximum output gradation value." However, as noted herein, Haruo is not suggestive of obtaining the "color ratio," as required by the claims of the present invention. Hence, contrary to the Examiner's assertion, Haruo does not teach or suggest adjusting the color balance of each color component using its respective color ratio in a manner required in claim 12.

Claim 13 depends on claim 11 and additionally requires utilizing "the product value obtained by multiplying the maximum value by its color ratio as its final pixel value, if the correction value of the at least one color component underflows from the minimum output gradation value." However, as noted herein, Haruo is not suggestive of obtaining the "color ratio," as required by the claims of the present invention. Hence,

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contrary to the Examiner's assertion, Haruo does not teach or suggest adjusting the color balance of each color component using its respective color ratio in a manner required in claim 13.

§103 Rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, and not based on Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. 2143.

Here, the Examiner has failed to establish a *prima facie* case of obviousness because Haruo or Tamai individually or in combination therewith does not teach or suggest all the claim limitations of claims 16-20.

Applicants respectfully submit that the Examiner cannot use hindsight gleaned from the present invention to contradict the clear teaching of the prior art reference to render claims unpatentable. The prior must be judged based on a full and fair consideration of what that art teaches, not by using Applicant's invention as a blueprint for gathering various bits and modifying the pieces in an attempt to reconstruct Applicant's invention. Here, the Examiner has gone as far as to change the principle of the operation of the reference to render the reference inoperable for its intended purpose. Claim 16 requires "a conversion section for converting the image data in the RGB color system into a different color system for image quality adjustment." Whereas, paragraphs

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[0026], [0044] and [0084] in Haruo, cited by the Examiner, describes a reverse process: "RGB conversion means 1 converts an input luminance signal Y and color difference signals R-Y and B-Y into primary color RGB signals."

In addition, claim 16 requires a color balance adjustment section for "adjusting said pixel values of said each pixel to fixedly maintain a ratio among the pixel values of the respective color components based on the minimum value among said pixel values." In contrast, paragraphs [0006] and [0031] in Haruo, cited by the Examiner, merely describes that the correction factor k is determined based on equation (6) using the ratio of the amplitudes of color difference signals to the maximum value of the converted primary signals or peak value of the input luminance signal. That is, contrary to the Examiner's assertion, Haruo fails to teach or suggest "adjusting said pixel values of said each pixel to fixedly maintain a ratio among the pixel values of the respective color components based on the minimum value among said pixel values," as required by claim 16. Applicants respectfully submit that if the pixel value of the present invention is adjusted utilizing the Haruo's correction factor, as suggested by the Examiner, then it is possible to maintain the ratio among the pixel values of the respective color components based on zero, but it would not be possible to "maintain a ratio among the pixel values of the respective color components based on the minimum value among the pixel values," as required in claim 16. Applicants respectfully submit that the Examiner cannot use hindsight gleaned from the present invention to contradict the clear teaching of the prior art reference to render the claims unpatentable.

As admitted by the Examiner, Haruo does not teach or suggest a reverse conversion section and a judging section. To cure these deficiencies, the Examiner turns to Tamai. Even assuming *arguendo* that the Examiner's proposed combination is proper, the combination of Haruo and Tamai still fails to teach or suggest all of the elements of the present claims.

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Tamai relates to an image processing apparatus for converting a photographic original into an illustration image. However, contrary to the Examiner's assertion, Tamai does not teach or suggest "a judging section for determining whether pixel values of each pixel constituting the reverse-converted image data are confined within said predetermined gradation range," as required in claim 16. Tamai merely describes whether or not a pixel values are black. One of ordinary skill in the art will not equate the judging section of the present invention with judging whether a pixel value is black, as suggested by the Examiner.

It is respectfully submitted that even if the combination of bits and pieces of the prior art were assembled in the manner that the Examiner contends to have been obvious to one skilled in the art, the result still does not include an image processing apparatus of claims 16-20. Hence, contrary to the Examiner's assertion, the combination of Haruo and Tamai does not teach or suggest all of the elements of claims 16-20.

Claim 17 depends on claim 16 and additionally requires that the color balance adjustment section "fixedly maintain an average value of the pixel value of each color component contained in the pixel prior to the adjustment. However, contrary to the Examiner's assertion, Tamai, at best, merely describes that the maximum value and the minimum value of the pixel value are obtained to determine an average value thereof. Even if such technique is employed, applicants submit that it is not possible to "maintain an average value of the pixel value of each color component contained in pixel," as required in claim 17. Applicants respectfully submit that the Examiner cannot use hindsight gleaned from the present invention to render claim 17 unpatentable.

Claim 18 additionally requires that "the judging section is operable to determine a maximum pixel value contained in the pixel as overflowing from the predetermined gradation range." However, contrary to the Examiner's assertion, Haruo, at best, merely describes a technique for preventing overflow of the pixel value and not detecting an

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overflow, as required in claim 18. Applicants respectfully submit that the Examiner cannot use hindsight gleaned from the present invention to render claim 18 unpatentable.

Claim 19 additionally requires that "the judging section is operable to determine a minimum pixel value contained in the pixel as underflowing from the predetermined gradation range." However, contrary to the Examiner's assertion, Haruo does not even suggest of determining underflow of the pixel value, as required in claim 19. The force of logic compels the conclusion that a prior art reference which is silent as to the existence of a claimed element, cannot teach such claimed element. Applicants respectfully submit that the Examiner cannot use hindsight gleaned from the present invention to render claim 19 unpatentable.

Claim 20 additionally requires that the color balance adjustment section "maintain the ratio and/or average value of the pixel value of the pixel for adjustment." However, as noted herein, Haruo is not suggestive of maintaining the ratio and/or the average value of the pixel value for adjustment, as required in claim 20. Therefore, applicants respectfully submit that the Examiner cannot use hindsight gleaned from the present invention to render claim 20 unpatentable.

Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness because Haruo or Tamai individually or in combination therewith does not teach or suggest all the claim limitations of claims 16-20.

Statements appearing above in respect to the disclosures in the cited references represent the present opinions of the applicants' undersigned attorney and, in the event that the Examiner disagrees with any of such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the reference providing the basis for a contrary view.



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In view of the above, applicant believes the pending application is in condition for allowance.

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Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0624, under Order No. NY-KIT 360-US (10312937) from which the undersigned is authorized to draw.

Dated: May 16, 2008

Respectfully submitted,

By 

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